molecules comprise substituents R₁, R₂, and R₃ attached at the positions of the OH- groups of a glycerol backbone, and wherein R₁, R₂, and R₃ are selected from the group consisting of a hydroxyl group and an octadecadienoic acid, the composition characterized in containing at least approximately 30% t10,c12 octadecadienoic acid, at least approximately 30% c9,t11 octadecadienoic acid, and about less than 1% total of 8,10 octadecadienoic acid, 11,13 octadecadienoic and trans-trans octadecadienoic acid at positions R₁, R₂, and R₃. Likewise, in other embodiments, a conjugated linoleic acid composition comprising a mixture of esters of conjugated linoleic acid isomers is provided, the mixture containing at least approximately 30% t10,c12 octadecadienoic acid, at least approximately 30% c9,t11 octadecadienoic acid, and about less than 1% total of 8,10 octadecadienoic acid, 11,13 octadecadienoic and trans-trans octadecadienoic acid.

IN THE CLAIMS:

Please substitute the following amended claims for the original pending claims of the same numbers; the amended claims are rewritten in clean form, in accordance with 37 CFR 1.121(c)(1)(i).

5. (Amended twice) A biologically active acylglycerol composition comprising a plurality of acylglycerol molecules wherein the acylglycerol molecules comprise substituents R_1 , R_2 , and R_3 attached at the positions of the OH- groups of a glycerol backbone, and wherein R_1 , R_2 , and R_3 are selected from the group consisting of a hydroxyl group and an octadecadienoic acid, said composition characterized in containing at least approximately 30% t10,c12 octadecadienoic acid, at least approximately 30% c9,t11 octadecadienoic acid, and about less than 1% total of 8,10 octadecadienoic acid, 11,13 octadecadienoic and transtrans octadecadienoic acid at positions R_1 , R_2 , and R_3 , wherein said percentages are peak area percentages as determined by gas chromatography.

13. (Amended twice) A composition comprising a prepared food product containing a biologically active acylglycerol composition comprising a plurality of acylglycerol molecules wherein the acylglycerol molecules comprise substituents R_1 , R_2 , and R_3 attached at the positions of the OH- groups of a glycerol backbone, and

wherein R_1 , R_2 , and R_3 are selected from the group consisting of a hydroxyl group and an octadecadienoic acid, said composition characterized in containing at least approximately 30% t10,c12 octadecadienoic acid, at least approximately 30% c9,t11 octadecadienoic acid, and about less than 1% total of 8,10 octadecadienoic acid, 11,13 octadecadienoic and transtrans octadecadienoic acid at positions R_1 , R_2 , and R_3 , wherein said percentages are peak area percentages as determined by gas chromatography.